

BOROUGH OF LOUGHBOROUGH.

*Annual Report of the Medical Officer of Health for the Year ended
December 31st, 1900.*

To the Town Council of the Borough of Loughborough.

Gentlemen,

I have the honour to present to you my Annual Report for the Year 1900.

Area—3045 statute Acres.

Census, 1891.—Population 18,196

No. of Inhabited houses 3546

Average No. of persons per house 5.1

Population estimated to middle of year, 24,000

At the present time the number of inhabited houses is 4,956, which, at an average of five persons per house, would give a population of 24,780.

BIRTHS.

Total number of births registered 590, which is equal to a birth rate of 24.6 per thousand of the estimated population. This is the lowest birth rate of the last ten years, being nearly 7 per thousand below the average.

MORTALITY.

The total number of deaths registered was 409, but 14 of these were of persons not belonging to the Borough, who died at the Loughborough Workhouse and Hospital. By subtracting these, and adding 6 deaths which occurred outside the Borough of persons belonging to it; we get the corrected number of deaths of residents for the year, which is 401. This gives an annual death rate of 16.7 per thousand of the estimated population, which is 1.5 above the death rate for 1899, and is slightly below the average death rate of the last ten years.

ZYMOTIC MORTALITY.

The total number of deaths from zymotic diseases was 84, and the zymotic death rate was therefore 3.5, being 1.7 above the zymotic death rate of 1899, and 1.1 above that of the last ten years. This increase of zymotic mortality is not attributable to local insanitary conditions, but was brought about rather by epidemics and climatic conditions. The year commenced with a severe epidemic of influenza, which caused nine deaths. At the same period whooping cough was prevalent, and as the weather was then inclement, this disorder was frequently complicated with bronchitis, and was also the cause of nine deaths. In the months of July, August and September, diarrhœa was prevalent, owing to the very hot weather which then prevailed, and this disease was responsible for no fewer than 41 deaths. In the month of October measles began to be prevalent, and to this disorder 12 deaths were attributable. These are a combination of causes of zymotic mortality which is not likely to occur again for some years.

INFANT MORTALITY.

The total number of deaths of infants under one year of age was 117, which is 33 more than last year, and 14 more than the average of the last ten years. This gives an infant mortality of 198 per thousand births registered. This increased infant mortality is due to two of the causes which brought about the increased zymotic mortality, viz : diarrhœa and whooping cough.

INFECTIOUS DISEASES.

The total number of cases of infectious disease notified was 183, which is 20 more than last year, and 27 above the average of the last ten years. This increase is principally due to an increase in the number of cases of scarlet fever, which will be dealt with under its proper heading. The number of cases of the several diseases was as follows :

Diphtheria	...	...	5
Membranous Croup...	...	...	2
Erysipelas	...	...	10
Scarlet Fever	...	...	105
Enteric Fever	...	...	57
Puerperal Fever	...	...	4

DIPHTHERIA.

Five cases of this disease were notified. Three were of the post-scarlatinal type, and the other two were of a mild character. There was no spread of the disease, beyond the three families originally affected, and there was no mortality. In the two instances in which the disease arose independently, it was referable to local insanitary conditions. The Borough has fortunately been very free from this dangerous disease during the last seven years, and the number of cases this year is two below the average of the last ten years.

MEMBRANOUS CROUP.

Two cases of this disease were notified, both of whom recovered. Since the introduction of bacteriological methods of treatment, these diseases have been much less fatal than previously.

ERYSIPELAS.

Ten cases of this disease were notified. The cases were all mild, and there was no mortality.

SCARLET FEVER.

105 cases of this disease were notified which is 31 more than last year, and 13 more than the average of the last ten years. The disease commenced to be prevalent in the early days of the month of May, and as most of the cases were found in children attending one school, I made careful enquiry into the illness of all the children absent from this particular school. I at length found a child suffering from what the parents considered simple sore throat, but was in reality scarlet fever. I examined the other children, and found another boy of school age in the peeling stage of the same disease. This boy was, and had been for three weeks attending school while suffering from scarlet fever. From what I have observed for years, I have come to the conclusion that it is mild cases, such as this, which spread scarlet fever. It is on this account that The Notification Act has been of such little use in preventing the spread of this disease. Many mild cases occur in which the rash is ill-defined and evanescent; so that the parents do not suspect the existence of dangerous infectious disease, and consequently do not call in medical assistance, or take any precautions against it spreading. It is for this reason that I have not advised the Sanitary Committee to incur the great expense of isolating in hospital, cases of scarlet fever notified, as in my opinion the disease is not spread by cases coming under the notice of, and treated by doctors, but by mild cases the real nature of which parents do not know or in some instances do not wish to know. The disease continued prevalent during the months of May, June, July and August, and then subsided; and at the end of the year the town is nearly free from this disease. In every known case the patient is isolated as much as possible in the house, disinfectants are used, and instructions given as to preventing the spread of the disease. Schools where cases have been known to exist, were specially cleansed and disinfected during the holidays.

ENTERIC FEVER.

57 cases of this disease were notified during the year. This is one less than in 1899, and 35 above the average of the last ten years. It is quite obvious that this number is much in excess of what it ought to be, and consequently the occurrence of cases in this disease throughout the year has occupied the attention of your officials and caused continual anxiety to the Sanitary Committee. Every case was investigated immediately it came under notice, the water supply was ascertained, the dairies and

cowsheds whence the milk supply was obtained were visited, and the various sources of food supply were enquired into, with a view to discovering some common cause of origin; but no such common cause could be discovered. Of course in these days of imported fruit and other food stuffs it is impossible to trace every possible cause. My opinion remains the same as I expressed in last year's annual report, that the cause of the increased prevalence is the hot summers which we have had for the last three years, acting on a filth saturated soil, favouring therein the development of disease germs. The following is a list of streets in which cases of the disease occurred, and the number which occurred in each :—Leopold street, 2; Paget street, 5; Station street, 4; Nottingham road, 4; Aslett's Yard, 2; Fox and Hounds yard, 1; Albert street, 1; Sparrow hill, 3; Hartington street, 6 in one house; John street, 1; Russell street, 3; New King street, 1; Pinfold street, 2; Union street, 1; School street, 1; Chapman street, 1; Baxter gate, 1; Steeple row, 1; Wellington street, 2; Salmon street, 3; Ratcliffe road, 1. From this list it will be seen that the large majority of the cases occurred in the older parts of the town, or, in modern parts, where the land built upon had previously been highly manured allotment gardens. It may also be observed that most of the cases occurred in the families of the poorer working class. The following insanitary conditions were found to exist on premises where cases occurred.

Defective drainage	...	...	7
Dirty houses	...	...	3
Dirty and damp houses		...	3
Impure water...	...	...	2
Middens	...	...	8
Filthily kept pail closets		...	1

Four of the cases were imported, and no cause could be found for the remaining cases.

PUERPERAL FEVER.

Four cases of this disease were notified, two of which terminated fatally. In each case the persons attending were cautioned against attending other persons for a specified period, and all other reasonable precautions were adopted.

MEASLES.

Early in July a few cases of Measles came to my knowledge on the Paget Estate. I tried to keep them isolated as much as possible, but as the weather was then very fine, I fear the patients were not kept strictly indoors, as cases kept occurring in this neighbourhood. After the schools closed for the summer holidays, the disease almost disappeared, until the beginning of October, when several cases occurred in children attending the Shakespeare street Infant School. On the 15th of October the cases were so numerous that I decided to close these Infant schools for a month. The epidemic increased notwithstanding, indeed the effect of closing the schools was scarcely appreciable. In the last week of November the epidemic had extended all over the town. Up to this period I had given instructions that all children living in houses where a case of measles existed should be excluded from school, consequently the schools at this date were half empty. Considering the great loss of education which the town was sustaining, and the little effect this exclusion was having upon the spread of the epidemic, which was almost exclusively confined to infants, I closed all the Infant Schools in the town, and recommended the School Authorities to get the boys and girls, as distinguished from the infants, back to school. From this time to the end of the year, the epidemic declined, and at the end of the year there were very few cases of measles in the Borough.

DIARRHŒA.

This disorder was very prevalent, especially amongst infants, during the hot months of July, August and September. There were 41 deaths registered as due to this cause, which is 19 above the average of the last ten years. All were of children, 31 being under one year of age, and the remaining 10 were between one and five years. As I have pointed out in previous reports, hot weather is in itself a productive cause of this complaint; but ground air, laden with the resultant gasses of ernmentation, and putrefaction, which occurs in the filth saturated surface soil of towns, is a much

more potent cause. Such surface soil, containing quantities of disease germs. is also dried into dust and blown about in the hot weather, contaminating food stuffs, and, freely inhaled by infants previously debilitated by living in badly ventilated cottages, gives rise to diarrhœa and other septic diseases. Improper feeding and neglect, doubtless, also increases the mortality from diarrhœa, but improper feeding and neglect continues all the year round, while the great mortality from this disorder is confined to July, August and September.

PHTHISIS.

There were 21 deaths due to this disease, which is one less than the average of the last ten years. This disease which is most fatal between the ages of 15 and 35, is found more frequently in persons who live or work in damp, badly ventilated buildings, and but seldom occurs in persons who live in the open air.

TOWN IMPROVEMENTS.

The Sanitary Committee have been especially active during the past year. A very considerable improvement has been effected in portions of the Bridge street area ; also in Wood gate, and in Ashby square. All over the town middens have been abolished, drainage improved, and houses cleansed. Particulars of such work will be found in the Inspector's report appended hereto. About a third of a mile has been added to the length of buildings within the Borough, 144 new houses having been erected.

INSANITARY CONDITIONS EXISTING.

Although the sanitary condition of the town has been much improved during the last ten years, there are still directions in which improvements are desirable. The principal are :—

- (1.) The removal of all sources of soil pollution from the surface, or from defective drains, or from sunken cesspools or middens, and
- (2.) To see that the houses of the working classes are so constructed as to insure a sufficient supply of pure air to the inhabitants.

In order to accomplish these two objects, it will be necessary for the Sanitary Committee

- (1.) To continue in its present good work of abolishing the deeply sunk middens, which still exist in the Borough, until they have all been removed, and also to exercise the strictest surveillance over the drainage of the Borough, to insure that as little sewage as possible should find its way into the sub-soil.;
- (2.) To take steps as soon as possible to remove or alter some of the premises in the Borough which are of the back to back class, the houses being in some instances damp, dilapidated, and badly ventilated.

WATER SUPPLY.

Throughout the whole of the year the supply of water from the Corporation Waterworks was abundant in quantity and of good quality. The greatest care and watchfulness has been exercised by the Water Committee to prevent the water supply from the possibility of contamination. A complete survey of the watershed was made in the autumn, and every possible source of contamination was visited. Valuable recommendations were made, which will doubtless all be carried out.

DISINFECTION.

The disinfection of rooms, bedding, clothing &c., after cases of infectious disease, has been done by fumigation with sulphurous acid gas. As regards the rooms this form of disinfection is sufficient, if supplemented by washing of the floors and walls with solution of perchloride of mercury 1 in 1000. But for clothing, bedding, &c., steam disinfection is much more effectual. I therefore recommend that a steam disinfector be provided.

SCAVENGING.

This work is done directly by the Corporation, who only contract for horses. The work has been done in a satisfactory manner during the year.

SEWERAGE.

The Sewage Farm and Works have been acting satisfactorily during the year. The effluent has at all times been of a satisfactory character. Special attention has been given to flushing and cleansing the sewers. During the recent exceptionally high floods, sewage matter was forced from the sewers in several of the streets lying below the level of the canal. Works will doubtless be executed soon, which will prevent a recurrence of this nuisance.

ISOLATION HOSPITAL.

45 cases of enteric fever were isolated and treated at this hospital during the year. Of these 38 were discharged cured, and 7 died. This is equal to a mortality of 15·5 per cent. of the cases admitted, a percentage which indicates how dangerous a disease this is. It is interesting to note that all the fatal cases were admitted at an advanced stage of the disease and that no medical advice had been given in the early stages. It is reasonable to assume that the patients were improperly fed previous to admission, indeed, in most cases, we were able to ascertain, by enquiry from friends, and observations of the dejecta of the patients that this was so. The duration of the stay of the fatal cases from admission to death was 8, 6, 5, 7, 12, 9 and 5 days respectively; while the average duration of the stay of the patients who recovered was 33 days. This hospital has during the year fulfilled the purpose for which it was erected, as it has prevented enteric fever from at any time, becoming prevalent. As soon as a case was discovered, it was removed, the house and clothing disinfected, and, except in six instances, no spread of the disease occurred. In these last mentioned six instances, the first case was allowed to remain at home for periods varying from one to three weeks before a doctor was called in, and so other members of the family became infected, as follows:—first instance, three others; second, six others; third, one other; fourth, two others; fifth, two others; and sixth, four others. From this it will be seen that enteric fever is highly infectious, and cannot be isolated in a working man's cottage.

ADOPTIVE ACTS.

The Infectious Diseases (Prevention) Act, 1890, has been adopted by the Town Council.

DAIRIES, COWSHEDS AND MILKSHOPS.

The regulations regarding the lighting, ventilation, cleansing, drainage, and water supply to the above, have been well observed during the year.

CONCLUSION.

Systematic inspections were made of the Wood Gate district, including Mills' yard; the Wellington street district; the Nottingham road district; the Station street district; and the Ward's end district. Frequent visits were also made to lodging houses, tailoring and dressmaking workshops, schools, &c., to see that sanitary regulations were observed and care taken against the spread of contagious and infectious diseases.

In the Inspector's report may be seen details of the sanitary work accomplished during the year.

Appended are tabulated statistics as to population, birth and mortality for the last ten years; also of infectious diseases notified during the year, and of deaths classified according to diseases and ages, copies of which, as well as of this report, it will be necessary to send to the Leicestershire County Council, and to the Local Government Board.

I have the honour to be, Gentlemen,

Your obedient servant,

THOMAS CORCORAN,

Medical Officer of Health

Loughborough,

25th January, 1901.

ABSTRACT OF TABULATED STATISTICS APPENDED TO THE REPORT.

Year 1900—Population (in middle of year) 24,000.

Births, number, 590; rate 24·6. Deaths under one year of age, number 117; rate per 1000 births registered, 198. Deaths at all ages, number 409; rate, 17·0. Deaths in public institutions, 37. Deaths of non-residents registered in District, 14. Deaths of residents registered beyond District, 6. Deaths at all ages : nett; number 401; rate 16·7.

Average for years 1890-1899—Population, 19,337. Births number, 604; rate, 31·1. Deaths under one year of age, number 103; rate per 1000 births registered, 171. Deaths at all ages, number 346; rate 17·6. Deaths in public institutions 32. Deaths of non-residents registered in District, 11. Deaths at all ages; nett; number 338; rate 17·4.

Mortality from all causes during year 1900 at subjoined ages—under one year, 117; one and under five, 49; five and fifteen, 10; fifteen and under twenty-five, 14; twenty-five, 118; sixty-five and upwards, 87. Deaths in public institutions, 37.

Mortality during year, 1900, from subjoined causes :—Measles, 12; Scarlet Fever, 4; Whooping Cough, 9; Enteric Fever, 7; Epidemic Influenza, 9; Diarrhoea, 41; Enteritis, 2; Puerperal Fever, 2; Phthisis, 21; Other Tubercular diseases, 10; Cancer malignant disease, 13; Bronchitis, 33; Pneumonia, 21; Pleurisy, 3; Other diseases of respiratory organs, 1; Alcoholism, Cirrhosis of Liver, 5; Venereal diseases, 1; Premature birth, 8; Diseases and accidents of parturition, 2; Heart disease, 34; Accidents, 6; Suicides, 3; All other causes, 148. Total, 395.

*Annual Report of the Sanitary Inspector for the Year ended
December 31st, 1900.*

Gentlemen,

I have the honour of submitting to you my Annual Report of work done and Nuisances abated during the Year 1900. During the year, 196 notices have been issued, upon which there has been specified and carried out by the various owners of property the following work :—

House drains repaired	...	...	...	62
Yard surfaces repaired	...	...	...	21
Roofs, eaves gutters and down spouts repaired	...	...	...	16
Midden privies repaired	...	...	...	2
Do. converted to pails	...	...	...	94
Do. converted to W.C's	...	...	...	5
Pail closets, new provided	...	...	...	13
Do. converted to W.C's	...	...	...	0
Refuse receptacles provided	...	...	...	12
Animals kept filthy, removed	...	...	...	3
Dwellinghouses cleansed and limewashed	...	...	...	34
Closet pails renewed	...	...	...	33
Overcrowding abated	...	...	...	3
Privy ashpits converted to dry ashpits	...	...	...	26
Other insanitary conditions abated	...	...	...	33
Unhealthy dwellings closed	...	...	...	11
Houses supplied with town's water	...	...	...	21
Notices served <i>re</i> dirty closets, &c.	...	...	...	21
Offensive deposits, manure, &c., removed	...	...	...	1

The following is a list of inspections and visits made to premises during the year :—

Dwelling-houses inspected	...	...	...	429
Re-inspections of Dwelling-houses	...	...	...	655
Miscellaneous reports	...	...	...	441
Visits paid to infected Dwelling-house	...	...	...	257
Factories and Workshops visited	...	...	...	12
Visits to Common Lodging-houses	...	...	...	30
Complaints received	..	...	...	64
Bake-houses visited and inspected	...	...	...	24
Slaughter-houses visited and inspected	...	...	...	74
Rooms fumigated after infectious diseases	...	...	...	163
Schools inspected	...	...	...	4
Communications received <i>re</i> dust removal	...	...	...	440
Cowsheds inspected	...	...	...	15
Samples of water submitted for analysis	...	...	...	11

SCAVENGING.

The following figures will show at a glance the amount of refuse removed from amidst the homes of the people during the year. The total number of ashpits emptied during the year was 2,129. Of this number, 975 were midden privies, and the remaining 1154 were dry ashpits. The total quantity of refuse removed amounts to 6,397 loads. Of this quantity 4,187 loads were dry ashes and

have been deposited at the Sewage Farm to be used as fuel. The remaining 2,210 loads of night-soil and pan manure have been disposed of to various farmers in the district. There are within the Borough about 1,460 pail closets. These are emptied weekly. The ash tubs and dust bins receive similar attention. The whole of the work has been carried out in a fairly satisfactory manner, but I am confident greater efficiency would be attained by the Corporation providing their own horses for this work.

COMMON LODGING-HOUSES.

The Common lodging houses have been inspected regularly during the year, and found at all times to be in a cleanly condition. During the year additional premises have been registered for the above purpose, viz : Nos. 36 and 37, The Rushes.

DAIRIES AND COWSHEDS.

During the year the Dairies and Cowsheds have been inspected regularly and found at all times to be in a cleanly condition.

SLAUGHTER HOUSES.

The Slaughter Houses when inspected have been found in a cleanly condition.

MARKETS.

The Markets have been inspected regularly, and all food offered for sale found wholesome; at least its condition has been such as not to warrant seizure.

I have the honour to be, Gentlemen,

Your obedient servant,

RALPH LORD,

Sanitary Inspector.

